

REMARKS

Claims 1-31 are pending in the reissue application. Claims 1, 16-17, 21 and 25 are independent claims. Claims 1-16 correspond to original claims 1-16 of U.S. Patent No. 5,774,106, which is sought to be reissued in the present reissue application. Claims 17-28 have previously been added at the filing of the present reissue application. Independent claims 17, 21 and 25 have now been amended in several particulars for purposes of clarity and brevity, while Claims 29-31 have been newly added to depend upon base claims 17, 21 and 25 in accordance with current Office policy, to further define Applicants' disclosed invention and to assist the Examiner to expedite compact prosecution of the instant application.

As a preliminary matter, Applicants note that all claims 1-28 as previously pending in this reissue application (including the original claims 1-16 of U.S. Patent No. 5,774,106) have been allowed as per previous Office Action. However, the Examiner has apparently changed his mind, and has now rejected all claims 1-28 under 35 U.S.C. §251 as being an improper capture of what the Examiner alleges as "broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. Specifically, in support of this rejection, the Examiner, on pages 2-3 of the Office Action (Paper No. 11), asserts that,

During the prosecution of the parent application, applicant added the above limitations (i.e., "simultaneously generates two different display voltages from the selected display voltage level") into the claim 1 of the parent application to distinguish the prior art reference to Yamazaki. And at paper No. 12 of the parent file, applicant specifically argued that Yamazaki's level shifter circuit 216 does not simultaneously generate two different display voltages as does output means 129, 131 in Figs. 9 and 11 of the present

application.

The Examiner has also recognized that the recapture rule can also be avoided in some circumstances, such as where claims that are broader in scope in some aspects, but remain narrower in other respects as mandated by MPEP §1412.02.

In response to this rejection, Applicants note that claims 1-16 correspond to, and have not been broadened relative to the original claims 1-16 of U.S. Patent No. 5,774,106 to capture any subject matter that is allegedly surrendered in the application for the patent upon which the present reissue is based. As a result, no "improper capture" exists and claims 1-16 should be in condition to be passed to issue, as was previously indicated in the previous Office Action.

With regard to claims 17-28, Applicants respectfully submit that each of independent claims 17, 21 and 25 have previously been amended to include newly added limitations such that the scope of these claims no longer results in a recapture of the alleged surrendered subject matter.

For example, independent claim 17 has previously amended to define a liquid crystal display device comprising:

- a liquid crystal panel having a plurality of columns and a plurality of rows for displaying an image in accordance with display data; and

- a data driver coupled to said liquid crystal panel, said data driver being arranged on a single side of said liquid crystal panel, said data driver having an input terminal and a plurality of output terminals, each of said output terminals corresponding to each of at least a part of said columns of said liquid crystal panel, said data driver including:

- a generator for generating a plurality of display voltages, **said display voltages including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales,**

- a selector for selecting one of said plurality of display voltages **in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data,** and

an output circuit for outputting said selected one of said display voltages to said each of said output terminals;
wherein two of said selected one of said display voltages which correspond to adjacent two of said output terminals have different polarity.

Similarly, independent claim 21 has previously amended to only define a data driver for coupling to a liquid crystal panel, having a plurality of columns and a plurality of rows for displaying an image in accordance with display data, said data driver being arranged on a single side of said liquid crystal panel, and comprising:

a generator for generating a plurality of display voltages, **said display voltages including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales;**
a selector for selecting one of said plurality of display voltages **in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data;** and
an output circuit for outputting said selected one of said display voltages to said each of said output terminals;
wherein two of said selected one of said display voltages which correspond to adjacent two of said output terminals have different polarity.

As expressly defined in base claims 17 and 21, the display voltages have now been defined to include a newly added limitation such as “**including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales.**” The selection of one of the display voltages has now been defined to include a newly added limitation such as “**in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data.**” In addition, **two of said selected one of said display voltages** have been added to **correspond to adjacent two of said output terminals have different polarity.**

These newly added narrowing limitations in the reissue claims 17 and 21 are

not defined anywhere in each of the original base claims 1, 11 and 16 of U.S. Patent No. 5,774,106, and modify the claims such that the scope of the claims no longer results in a recapture of the alleged surrendered subject matter.

Alternatively, independent process claim 25 has previously amended to define a method of applying display voltages to a liquid crystal panel that is different in scope of coverage from that of original process claim 16 of U.S. Patent No. 5,774,106. For example, claim 25 defines a method of applying display voltages to a liquid crystal panel, having a plurality of columns and a plurality of rows for display an image in accordance with display data, and comprising the steps of:

providing an input terminal and a plurality of output terminals, said output terminals being coupled to said liquid crystal panel, said output terminals being arranged on a single side of said liquid crystal panel, each of said output terminals corresponding to each of at least a part of said columns of said liquid crystal panel;

generating a plurality of display voltages, said display voltages including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales;

selecting one of said plurality of display voltages in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data;
and

outputting said selected one of said display voltages to said each of said output terminals, thereby applying said selected one of said display voltages to said liquid crystal panel;

wherein two of said selected one of said display voltages which correspond to adjacent two of said output terminals have different polarity.

Again, as expressly defined in base claims 25, the liquid crystal panel has now been defined to include a newly added limitation such as “plurality of columns and a plurality of rows” and provided with “**an input terminal and a plurality of output terminals, said output terminals being coupled to said liquid crystal**

panel ... arranged on a single side of said liquid crystal panel, each of said output terminals corresponding to each of at least a part of said columns of said liquid crystal panel." The display voltages have now been defined to include a newly added limitation such as "including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales." The selection of one of the display voltages has now been defined to include a newly added limitation such as "in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data." In addition, two of said selected one of said display voltages have been added to correspond to adjacent two of said output terminals have different polarity.

Again, these newly added narrowing limitations in the reissue claim 25 are not defined anywhere in each of the original base claims 1, 11 and 16 of U.S. Patent No. 5,774,106, and modify the claim such that the scope of the claim no longer results in a recapture of the alleged surrendered subject matter.

In view of the foregoing explanations and distinctions between the subject matter of newly added base claims 17, 21 and 25 relative to the original base claims 1, 11 and 16 of U.S. Patent No. 5,774,106, Applicants respectfully request that the rejection of claims 17-28 under 35 USC 251 be withdrawn.

Lastly, claims 29-31 have been newly added to depend upon base claims 17, 21 and 25 to define that "two different display voltages" are "generated simultaneously so that said selected one of said display voltages can be outputted as an output display voltage for each of said output terminals coupled to said liquid crystal panel". A fee of \$54.00 incurred by the addition of claims 29-31.

In view of the foregoing amendments, arguments and remarks, all claims 1-31 are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is

requested to telephone Applicants' attorney at the Washington DC area office at (703) 312-6600.

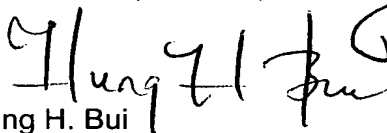
INTERVIEW:

In the interest of expediting prosecution of the present application, Applicants respectfully request that an Examiner interview be scheduled and conducted. In accordance with such interview request, Applicants respectfully request that the Examiner, after review of the present Amendment, contact the undersigned local Washington, D.C. area attorney at the local Washington, D.C. telephone number (703) 312-6600 for scheduling an Examiner interview, or alternatively, refrain from issuing a further action in the above-identified application as the undersigned attorneys will be telephoning the Examiner shortly after the filing date of this Amendment in order to schedule an Examiner interview. Applicants thank the Examiner in advance for such considerations. In the event that this Amendment, in and of itself, is sufficient to place the application in condition for allowance, no Examiner interview may be necessary.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including a fee of \$54.00 incurred by the addition of claims 29-31, or any extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (500.33793R00).

Respectfully submitted,

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